

GRIPPING DEVICE FOR A ROBOT FOR FEEDING WORKPIECES TO A
MANUFACTURING PLANT, AND METHOD FOR THE OPERATION THEREOF

Abstract of the Disclosure

A gripping device for a manipulation system, particularly a robot, for receiving workpieces and feeding them from a readied stack of the workpieces to a manufacturing plant such as a metal sheet folding machine, punching press, welding plant, etc. The device has a gripper head fitted with a gripper such as suction cups, magnets, tongs, etc., and a detection system for detecting characteristics of the workpiece gripped by the gripper. A pulse emitter excites vibrations in the workpiece and the vibration spectrum of the workpiece is compared to reference vibration data to determine characteristics of the gripped workpiece, such as whether two or more workpieces are stuck together, or whether the workpiece is the correct workpiece.